

PATENT Attorney Docket No. 214678 Client Reference No. 72011.02 02.1304

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

BAHL et al.

Group Art Unit: 2664

Application No. 10/014,104

Examiner: Unassigned

Filed: December 11, 2001

For: CHANNEL ACCES

CHANNEL ACCESS SCHEME FOR USE

IN NETWORK COMMUNICATIONS

CERTIFICATE OF MAILING
I hereby certify that this INFORMATION DISCLOSURE
STATEMENT (along with any documents referred to as being
attached or enclosed) is being deposited with the United
States Postal Service on the date indicated below with
sufficient postage as first class mail in an envelope
addressed to: Commissioner for Patents, P.O. Box 1450,

Alexandria, VA 22313-1450.

INFORMATION DISCLOSURE STATEMENT

RECEIVED

FEB 1 2 2004

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Technology Center 2600

Pursuant to 37 CFR 1.97 and 1.98, the references listed on the enclosed Form PTO-1449 and/or Substitute Form PTO-1449 ("Form 1449") are submitted for consideration by the Examiner in the examination of the above-identified patent application.

The full consideration of the references in their entirety by the Examiner is respectfully requested and encouraged. Also, it is respectfully requested that the references be entered into the record of the present application and that the Examiner place his or her initials in the appropriate area on the enclosed Form 1449, thereby indicating the Examiner's consideration of each of the references.

The submission of the references listed on the Form 1449 is for the purpose of providing a complete record and is not a concession that the references listed thereon are prior art to the invention claimed in the patent application. The right is expressly reserved to establish an invention date earlier than the above-identified filing date in order to remove any reference submitted herewith as prior art should it be deemed appropriate to do so.

Further, the submission of the references is not to be taken as a concession that any reference represents art that is relevant or analogous to the claimed invention. Accordingly, the right to argue that any reference is not properly within the scope of prior art relevant to an examination of the claims in the above-identified application is also expressly reserved.

The Information Disclosure Statement is being filed: 冈 within any one of the following time periods: (a) within three months of the filing date of a national application other than a continued prosecution application under 37 CFR 1.53(d); (b) within three months of the date of entry of the national stage as set forth in 37 CFR 1.491 of an international application; (c) before the mailing date of a first Office Action on the merits; or (d) before the mailing of a first Office Action after the filing of a request for continued examination under 37 CFR 1.114. after (a), (b), (c) or (d) above, but before the mailing date of a final action under П 37 CFR 1.113, a Notice of Allowance under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and includes *one* of: the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below). orthe fee of \$180 set forth in 37 CFR 1.17(p) (see "Fees" below). П after the mailing date of a final action under 37 CFR 1.113 or a Notice of Allowance П under 37 CFR 1.311, or an action that otherwise closes prosecution in the application, and on or before payment of the issue fee, and includes the Statement under 37 CFR 1.97(e) (see "Statement under 37 CFR 1.97(e)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below). after the mailing date of a Notice of Allowance under 37 CFR 1.311, and on or before П payment of the issue fee, and within thirty days of receiving each item of information contained in the Information Disclosure Statement, and includes the Statement under 37 CFR 1.704(d) (see "Statement under 37 CFR 1.704(d)" below), and the fee of \$180 as set forth in 37 CFR 1.17(p) (see "Fees" below). NOTE: This is for original applications except applications for a design patent, filed on or after May 29, 2000, wherein a paper containing only an Information Disclosure Statement in compliance with 37 CFR 1.97 and 1.98 is being filed. Copies of the References Copies of the references listed on the enclosed Form 1449 are enclosed herewith. Attached to each reference not in the English language is a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3). An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of the relevance pursuant to 37 CFR 1.98(a)(3). A copy of the foreign search report is enclosed herewith. П Ø The references listed on the enclosed Form 1449 were previously identified in the parent application(s) of the present application, and copies of the references were

In re Appln. of: BAHL et al. Application No.: 10/014,104

furnished at that time. Accordingly, additional copies of the references are not

In re Appln. of: BAHL et al. Application No.: 10/014,104

submitted herewith, so as not to burden the file with duplicate copies of references. The Examiner is respectfully requested to carefully review the references in accordance with the requirements set out in the Manual of Patent Examining Procedure. In accordance with 37 CFR 1.98(d), the details of the parent application(s) relied upon for an earlier filing date under 35 USC 120 in which copies of the references were previously furnished are set out below:

U.S. APPLI	St	atus (check o	ne)	
U.S. APPLICATIONS	U.S. FILING DATE	PATENTED	PENDING	ABANDONED
1. 09/169,418	October 9, 1998	X		
2.				
3.				

3.							
Stater	nent under 37 CFR	1.97(e)					
	The undersigned hereby states that each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the Information Disclosure Statement.						
	Information Disclosoffice in a counte undersigned after n Information Disclosoffice.	hereby states that no sure Statement was cited rpart foreign patent appaking reasonable inquir osure Statement was known than three months nt.	in a communi plication, and y, no item of i known to any	cation from a , to the known information of individual	a foreign paten owledge of the contained in the designated in		
Stater	nent under 37 CFR	1.704(d)					
	Information Disclosoffice in a counterpany individual desi	hereby states that each sure Statement was cited part application and that gnated in 37 CFR 1.56(c) Disclosure Statement.	in a communi this commun	cation from a ication was r	a foreign paten not received by		
Fees		and the second s					
	No fee is owed by t The IDS Fee of \$18	he applicant(s). 30 under 37 CFR 1.17(p)	is enclosed he	erewith.			
Metho	od of Payment of Fe	es					
	Attached is a check	in the amount of \$	e amount of ©	(A du	inlicate conv.o		

this communication is enclosed for that purpose.)

In re Appln. of: BAHL et al. Application No.: 10/014,104

Authorization to Charge Additional Fees

If any additional fees are owed in connection with this communication, please charge Deposit Account No. 12-1216. (A duplicate copy of this communication is enclosed for that purpose.)

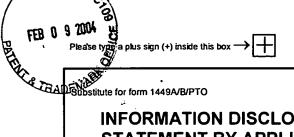
Instructions as to Overpayment

Credit Account No. 12-1216.
Refund

Phillip M. Pippenger, Reg. No. 46,055 LEYDIG, VOIT & MAYER, LTD. Two Prudential Plaza, Suite 4900 180 North Stetson Chicago, Illinois 60601-6780 (312) 616-5600 (telephone) (312) 616-5700 (facsimile)

Date: February 5, 2004

IDS (Revised 5/21/03)



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet of

	Complete if Knews—CEIVED
Application Number	
Filing Date	December 11, 2001 BAHL et al. FEB 1 2 2004
First Named Inventor	BAHL et al. FEB 1 & 2004
Group Art Unit	2664 - January Contor 2600
Examiner Name	Unassigned Technology Center 2600
Attomey Docket Number	214678

				U.S. PATENT DOCUMENTS		
	_	U.S. Patent Doo	ument			
Examiner Initials	Doc. No.	Application or Patent Number	Kind Code	Name of Patentee or Applicant	Date of Publication	Filing Date If Appropriate
	АА	4,751,742		Meeker	06/04/1998	
	AB	4,797,742		Sugiyama et al.	01/10/1989	
	AC	4,821,119		Gharavi	04/11/1989	
	AD	5,001,561		Haskell et al.	03/19/1991	
	ΑE	5,109,528		Uddenfeldt	04/28/1992	
	AF	5,115,309		Hang	05/19/1992	
•	AG	5,214,789		George	05/25/1993	
	АН	5,216,503		Paik et al.	06/01/1993	
	ΑI	5,315,670		Shapiro	05/24/1994	
	ΑJ	5,412,741		Shapiro	05/02/1995	
	ΑK	5,436,665		Ueno et al.	07/25/1995	
	ΑL	5,455,629		Sun et al.	10/03/1995	
	ΑM	5,513,379		Benveniste et al.	04/30/1996	
	AN	5,526,052		Ar	06/11/1996	
	ΑO	5,543,845		Asamura et al.	08/06/1996	
	ΑP	5,544,315		Lehfeldt et al.	08/06/1996	
	ΑQ	5,572,221		Marlevi et al.	11/05/1996	
	AR	5,621,467		Chien et al.	04/15/1997	
	AS	5,625,713		Allen et al.	04/29/1997	<u> </u>
	ΑT	5,629,780		Watson	05/13/1997	
	ΑU	5,675,384		Rananurthy et al.	10/10/1997	
	AV	5,745,642		Ahn	04/27/1998	
	AW	5,764,805		Martucci et al.	06/09/1998	
	AX	5,812,547		Benzimra et al.	09/22/1998	
	ΑY	RE 35,916		Dennison et al.	10/06/1998	
	ΑZ	5,825,759		Liu	10/20/1998	
	ВА	5,877,812		Krause et al.	03/02/1999	
	BB	5,896,176		Das et al.	04/20/1999	
	ВС	5,926,476		Ghaibeh	07/20/1999	
	BD	5,936,674		Kim	08/10/1999	
	BE	5,943,347		Shepard	08/24/1999	
	BF	5,953,344		Dail et al.	09/14/1999	
	BG	5,990,933		Ozone et al.	11/23/1999	
	вн	5,995,668		Corset et al.	11/30/1999	<u> </u>
	ВІ	6,002,802		Chujioh et al.	12/14/1999	
	ВJ	6,011,587		Sakazawa al. et	01/04/2000	
	вк	6,020,931		Bilbrey et al.	02/01/2000	
	ВL	6,035,073		Kaup	03/07/2000	<u> </u>
	вм	6,052,598		Rudrapatna et al.	04/18/2000	
	BN	6,055,339		Wilkinson	04/25/2000	
	ВО	6,078,616		Ozcelik et al.	06/20/2000	
Examiner S	ignature			Date Considered		

^{*} A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).

+ An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).

FEB 0	9 2004 Please type of plus sign (+) inside this box →
CE TRAIL	ENDARY. Substitute for form 1449A/B/PTO
	INFORMATION DISCLO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

2 Sheet of

Complete if Known				
Application Number	10/014,104			
Filing Date	December 11, 2001			
First Named Inventor	BAHL			
Group Art Unit	2664			
Examiner Name	Unassigned			
Attorney Docket Number	214678			

				U.S. PATENT DOCUMENTS		
		U.S. Patent Do	cument			
Examiner Initials	Doc. No.	Application or Patent Number	Kind Code	Name of Patentee or Applicant	Date of Publication	Filing Date If Appropriate
	BP	6,111,916		Talluri et al.	08/29/2000	
	BQ	6,125,278		Wieczorek et al.	09/26/2000	
	BR	6,141,453		Banham et al.	10/31/2000	
	BS	6,141,486		Lane et al.	10/31/2000	
	вт	6,167,084		Wang et al.	12/26/2000	
	ВU	6,188,905		Ruddrapatna et al.	02/13/2001	
	BV	6,240,076		Kanerva et al.	05/29/2001	
	BW	6,240,079		Hamalainen et al.	05/29/2001	
					DEC	CEIVED
						ט בו עיבוע
						1 2 2004
					FEI	8 1 % Z004
						Contar OF
					lecnnoi	ogy Center 26
		•				

				FOREI	GN PATENT DOCUMENTS			
		F	oreign Patent Documer	nt			Translation .	
Examiner Initials	Doc. No.	Office	Application or Patent Number	Kind Code	Name of Patentee or Applicant	Date of Publication	Yes	No*+

		OTHER - NON PATENT LITERATURE DOCUMENTS			
Examiner	Doc.	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher,		Translation	
Initials	No.	city and/or country where published.	Yes	No*+	
	вх	ZHANG et al., "Variable Bit-Rate Video Transmission in the Broadband ISND			
		Environment", Proceedings of the IEEE, Vol. 79, No. 2 (February 1991), pp. 214-222			
) E	BY	KHANSARI et al., "Low Bit-Rate Video Transmission Over Fading Channels for			
		Wireless Microcellular Systems", IEEE Trans. on Circuits and Systems for Video Tech,		1	
		Vol. 6, No. 1 (February 1996), pp. 1-11			
	BZ	PODOLSKY, et al., "Limited Retransmission of Real-Time Layered Multimedia Signal			
		Processing, (December 1998), pp. 591-596			
	CA	MOLLOY, et al., "A Video Codec Chipset for Wireless Multimedia Networking", IEEE			
	1	Sign. Proc. Society Workshop on VLSI Signal Processing, (September 1995), pp. 381-		1	
		390		L	

Examiner Signature	 Date Considered	
Examine Signature	Date Considered	

^{*} A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).

+ An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).

Please type a plus lign (+) inside this box -> +

DADEMAR	•
Substitute for	form 1449A/B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)
Sheet 3 of

Complete if Known				
Application Number	10/014,104			
Filing Date	December 11, 2001			
First Named Inventor	BAHL			
Group Art Unit	2664			
Examiner Name	Unassigned			
Attorney Docket Number	214678			

_	OTHER - NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book,		Translation	
Examiner Initials	Doc. No.	magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number (s), publisher, city and/or country where published.	Yes	No*+
	СВ	MCCANNE, et al., "Joint Source/Channel Coding for Multicast Packet Video", in		
		Proceedings of the International Conference on Image Processing, Vol. 1		
		(October 1995), pp. 23-26		
	СС	SANNEEK, et al., "A new Technique for Audio Packet Loss Concealment", Global		
		Telecommunications Conference, GLOBECOM '96 (May 1996), pp. 48-52		
	CD	MALLET, S., "Wavelets for Vision", Proceedings of the IEEE, Vol. 84, No. 4 (April 1996)		
	CE	BAHL, P., "Supporting Digital Video in a Managed Wireless Network", <i>IEEE</i> Communications Magazine, Vol. 36, Issue 6 (June 1998), pp. 94-102		
	CF	BAHL et al., "Optimizing Resource Utilization in a Wireless Multimedia Network", IEEE International Conference on Communications, ICC, Vol. 3 (June 1997), pp. 1432-1437		
	CG	RAMCHANDRAN et al., "Wavelets, Subband Coding, and Best Bases", Proceedings of the IEEE, Vol. 84, NO. 4 (April 1996), pp. 541-560		
	СН	SHEN, et al., "Compressed Image Error Concealment and Post-Processing for Digital Video Recording", <i>IEEE Asia-Pacific Conference on Circuits and Systems</i> (December 1994), pp. 636-641		
	СІ	BAHL, et al., "H.263 based Video Codec for Real-time Visual Communications, ICC '97, Vol. 2 (October 1997), pp. 773-779		_
		REC	E	VE
		FEB	1 2	2004
		Technoio Technoio	tav Ce	nter 2
			,	
	_			
			\vdash	
			$oxed{oxed}$	

Examiner Signature Date Considered

^{*} A concise statement of relevance is being submitted in lieu of a translation. 37 CFR 1.98(a)(3).

⁺ An English-language equivalent/patent, or an English-language abstract, or an English-language version of the search report or action by a foreign patent office in a counterpart foreign application indicating the degree of relevance found by the foreign office is being submitted in lieu of a concise explanation of relevance under 37 CFR 1.98(a)(3).